

## REMARKS

Applicants respectfully request entry of this amendment under 37 C.F.R. § 1.116, canceling claim 19 and placing claims 26-79 in condition for allowance. Applicants submit that the proposed amendments to claims 40, 50, 68, and 72 to recite polypeptides that "stimulate aortic smooth muscle cell proliferation" do not raise new issues or require any additional search of the art. These amendments are supported by the specification, for example in Figure 4 and at pages 268-270; at page 4, paragraph 4; and at page 119, paragraph 1. Therefore, these amendments should allow for immediate action. Applicants further submit that the entry of the amendments would place the application in better form for appeal should the Office dispute the patentability of the pending claims.

Applicants thank the Examiner for pointing out a clerical error in the numbering of SEQ ID NO:2 contained in the Sequence Listing submitted on November 8, 2002. Accordingly, a Substitute Sequence Listing, as hard copy and Computer Readable Form (CRF), is submitted herewith to replace the Sequence Listing and CRF filed on November 8, 2002. The Substitute Sequence Listing filed herewith corrects the numbering of SEQ ID NO:2 back to the numbering previously used in the Substitute Sequence Listing filed on August 16, 2002. Support for the renumbering of SEQ ID NO:2 was discussed in detail in the Response filed August 16, 2002, at pages 7-8. No new matter is introduced by this amendment.

### **Formal Matters**

Applicants thank the Examiner for considering items AO and AR-AV listed on the IDS filed March 6, 2002. However, in the Final Office Action the Examiner has maintained that the relevance of nucleic acid and protein sequence information contained in references cited by the Applicants cannot be evaluated "without either an alignment to the disclosed material or explanation of relevance." See Paper No. 18, at page 2, lines 23-26; and Paper No. 12, paragraph bridging pages 2-3. Applicants respectfully reiterate that only foreign language references must be accompanied by an explanation of the relevance. See, e.g., 37 C.F.R. 1.98(a)(3)(i). As the references cited in the March 2002 IDS are in the English language, no such statement of relevance or alignment is required by any authority known to Applicants' representatives.

**Claim Rejections under 35 U.S.C. § 112, first paragraph – Enablement**

The Examiner has rejected claims 40-59 and 68-75 under 35 U.S.C. § 112, first paragraph, alleging that, “the specification, while being enabling for the protein of SEQ ID NO:2 or as encoded by ATCC 97342 or fragments thereof that have the activity of stimulating the growth of aortic smooth muscle cells, does not reasonably provide enablement for proteins 90% or 95% identical to such, nor with protein fragments that have the activity of “regulating cell growth”. *See* Paper No. 18 at page 3, lines 12-16.

Applicants respectfully disagree. Applicants have argued that the specification provides ample guidance, including, for example, structural features and preferred epitopes, as to which regions of the TGFalpha HIII polypeptide may be altered with a reasonable expectation of success. Furthermore, the specification provides methods of assaying the activity of TGFalpha HIII variants and raising antibodies thereto. *See, e.g.*, Response of August 6, 2002, at pages 15-17. However, in the interest of facilitating the prosecution of the instant invention, claims 40, 50, 68, and 72 have been amended to recite “wherein said polypeptide stimulates aortic smooth muscle cell proliferation.” Applicants submit that the amended claims are fully enabled by the disclosure of the instant application, and respectfully request that the rejection of claims 40-59 and 68-75 under 35 U.S.C. § 112, first paragraph, be withdrawn.

**Allowable Subject Matter**

Applicants thank the Examiner for indicating that claims 60-67 and 76-79 are allowed, and that claims 34 and 36 would be allowable if rewritten in independent form. *See* Paper No. 18, page 5, lines 28-31. However, claim 33, the base claim of claims 34 and 36, has not been rejected. In fact, none of claims 33-39 has been rejected, although claims 33, 35, and 37-39 are listed on the Office Action Summary as having been rejected. It is noted that the previous rejections of claims 33-39 have been withdrawn. Applicants submit that all of claims 33-39 are allowable and request acknowledgement of such.

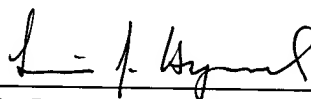
### CONCLUSION

Applicants respectfully request that the above-made amendments and remarks be entered and made of record in the file history of the instant application. Applicants believe that this application is now in condition for allowance.

If there are any fees due in connection with the filing of this paper, please charge the fees to Deposit Account No. 08-3425. If a fee is required for an extension of time under 37 C.F.R. § 1.136, such an extension is requested and the fee should also be charged to Deposit Account No. 08-3425.

Respectfully submitted,

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Enclosures



Docket No.: PF220P1

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:  
Wei, Ying-Fei

Application No.: 09/726,348

Group Art Unit: 1647

Filed: December 1, 2000

Examiner: Spector, L.

For: Transforming Growth Factor Alpha HIII

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

*In the Claims:*

40. (Amended Twice) An isolated polypeptide comprising an amino acid sequence at least 90% identical to an amino acid sequence selected from the group consisting of:
- (a) the full amino acid sequence shown in SEQ ID NO:2;
  - (b) amino acid residues 1 to 204 of SEQ ID NO:2; and
  - (c) amino acid residues 1 to 177 of SEQ ID NO:2;
- wherein the polypeptide [binds an antibody that specifically binds the polypeptide of SEQ ID NO:2]stimulates aortic smooth muscle cell proliferation.
50. (Amended Twice) An isolated polypeptide comprising an amino acid sequence at least 90% identical to an amino acid sequence selected from the group consisting of:
- (a) the amino acid sequence of the full-length polypeptide encoded by the cDNA contained in ATCC Deposit No. 97342;
  - (b) the amino acid sequence of the full-length polypeptide encoded by the cDNA contained in ATCC Deposit No. 97342 lacking a signal sequence; and
  - (c) the amino acid sequence of the full-length polypeptide encoded by the cDNA contained in ATCC Deposit No. 97342 lacking a signal sequence and transmembrane portion;
- wherein the polypeptide [binds an antibody that specifically binds the polypeptide of SEQ ID NO:2]stimulates aortic smooth muscle cell proliferation.

68. (Amended) An isolated polypeptide comprising a fragment of SEQ ID NO:2 wherein said fragment [regulates cell proliferation]stimulates aortic smooth muscle cell proliferation.
72. (Amended) An isolated polypeptide comprising a fragment of the amino acid sequence encoded by the cDNA contained in ATCC Deposit No. 97342 wherein said fragment [regulates cell proliferation]stimulates aortic smooth muscle cell proliferation.